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APC10 Antibody

Catalog # ASC11121

Product Information

Application	WB, IF, E, IHC-P
Primary Accession	Q9UM13
Other Accession	EAX05052, 119625457
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Calculated MW	21252
Concentration (mg/ml)	1 mg/mL
Conjugate	Unconjugated
Application Notes	APC10 antibody can be used for detection of APC10 by Western blot at 1 - 2 g/mL. Antibody can also be used for immunohistochemistry starting at 5 g/mL. For immunofluorescence start at 20 g/mL.

Additional Information

Gene ID	10393
Other Names	Anaphase-promoting complex subunit 10, APC10, Cyclosome subunit 10, ANAPC10, APC10
Target/Specificity	ANAPC10;
Reconstitution & Storage	APC10 antibody can be stored at 4℃ for three months and -20℃, stable for up to one year. As with all antibodies care should be taken to avoid repeated freeze thaw cycles. Antibodies should not be exposed to prolonged high temperatures.
Precautions	APC10 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	ANAPC10
Synonyms	APC10
Function	Component of the anaphase promoting complex/cyclosome (APC/C), a cell cycle-regulated E3 ubiquitin ligase that controls progression through the cell cycle (PubMed:18485873, PubMed:27120157, PubMed:27509861). APC/C acts by mediating ubiquitination and subsequent degradation of target proteins: it mainly mediates the formation of 'Lys-11'-linked polyubiquitin chains and, to a lower extent, the formation of 'Lys-48'- and 'Lys-63'-linked polyubiquitin chains (PubMed:18485873). APC/C catalyzes assembly of branched

'Lys-11'-/'Lys- 48'-linked branched ubiquitin chains on target proteins (PubMed:29033132). APC/C is activated by CDC20 in the metaphase/anaphase transition of cell cycle, targeting the degradation of cyclin B and securin (PubMed:27120157, PubMed:27509861). APC/C is regulated by the mitotic checkpoint complex (MCC), which inhibits APC/C and delays chromosome segregation (PubMed:27509861).

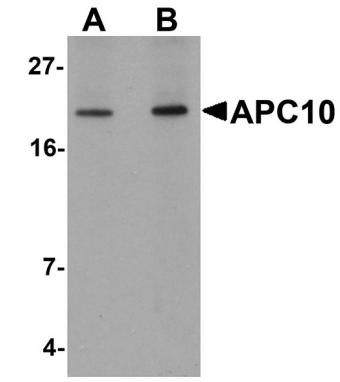
Background

APC10 Antibody: Cell cycle regulated protein ubiquitination and degradation within subcellular domains is thought to be essential for the normal progression of mitosis. APC10 is a highly conserved component of the anaphase promoting complex/cyclosome (APC/C), a cell cycle-regulated E3 ubiquitin ligase that controls progression through mitosis and the G1 phase of the cell cycle. APC/C is responsible for degrading anaphase inhibitors, mitotic cyclins, and spindle-associated proteins ensuring that events of mitosis take place in proper sequence. The individual APC/C components mRNA and protein levels are expressed at approximately the same levels in most tissues and cell lines, suggesting that they perform their functions as part of a complex. It has been suggested that APC10 plays a role to regulate the binding of specific substrates to the APC/C complex, similar to that of coactivators.

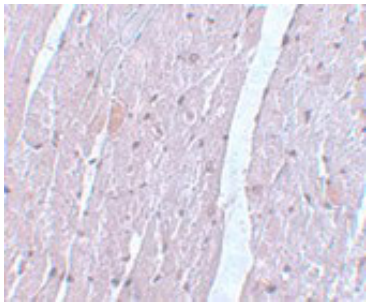
References

JM Peters. The anaphase promoting complex/cyclosome: a machine designed to destroy. Nat. Rev. Mol. Cell Biol.2006; 7:644-56.
Jorgensen PM, Graslund S, Betz R, et al. Characterisation of the human APC1, the largest subunit of the anaphase-promoting complex. Gene2001; 262:51-9.
Passmore LA, McCormack EA, Au SWN, et al. Doc1 mediates the activity of the anaphase-promoting complex by contributing to substrate recognition. EMBO J.2003; 22:786-96.

Images

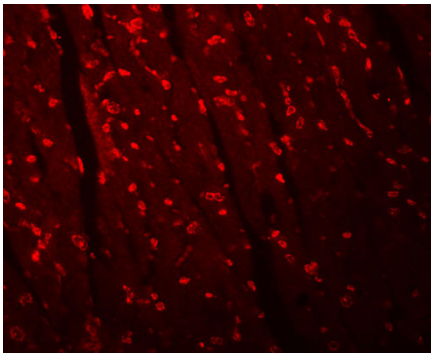


Western blot analysis of APC10 in mouse heart tissue lysate with APC10 antibody at (A) 1 and (B) 2 µg/mL.



Immunohistochemistry of APC10 in mouse heart tissue with APC10 antibody at 5 µg/mL.

Immunofluorescence of APC10 in mouse heart tissue with APC10 antibody at 20 µg/mL.



Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.